

# TRANSPORTATION ELEMENT

## General Overview

Town residents depend on the transportation facilities in their community and the region to connect them to other areas of the state and to the rest of the nation and the world. The type, quality and location of transportation facilities are an important component in residents' quality of life and in developing and maintaining a sustainable economy.

There is a significant relationship between transportation and land use. New development or changes in existing land uses, whether incremental or sudden, directly affects the safety and functionality of roadways and the demand for additional transportation facilities. On the other hand, the creation of new or improving existing transportation corridors can have a significant distributional affect on the type and timing of development within a community and/or a region. Thus, this element and the Land Use Element should support and complement one another.

For the foreseeable future, the private automobile will continue to dominate all modes of transportation. However, it is important to recognize that people have different needs and capabilities and that a good transportation system should include a variety of transportation choices.



## Objective of Element

The intent of this element is to provide basic information on the existing transportation network in the Town and in the region (Exhibit E-1). Next, statewide planning efforts are reviewed to assess how these efforts may or may not affect transportation facilities within and around the Town. State programmatic budgets are reviewed to determine what transportation projects, if any, are anticipated. The final section presents a future transportation network plan for the Town. Taken together this review will help to better define issues, problems and opportunities that need to be addressed to accommodate residents' needs. As an end product, the future transportation plan will guide development of the road network over the planning period. In addition, this element is intended to form the basis for transportation goals and objectives.

### Exhibit E-1. Basic Objectives of the Transportation Element

- Assess existing transportation facilities.
- Review statewide planning efforts.
- Review state programmatic budgets for transportation projects.
- Develop a long-term plan for transportation facilities in the community.
- Develop goals and objectives that will accommodate the needs of current and future residents.

## Existing Conditions

### Local Road Network

Roadways serve two competing functions: access to individual properties and traffic mobility. These needs compete in that as the number of property accesses increases along a route, traffic mobility decreases (Exhibit E-2).

To help plan for current and future traffic conditions, it is useful to categorize roads based on their primary function. Arterials accommodate the movement of vehicles, while local streets provide the land access function. Collectors serve both local and through traffic by providing a connection between arterial and local roads.

Map E-1 shows the various roads in the Town and how they are classified according to the Department of Transportation (DOT).

**Principal Arterials.** Interstate 94 is situated along the Town's northern boundary and is part of the nationwide Interstate System. US Highway 12/18 is a principal arterial running between Madison and Ft. Atkinson and points beyond. CTH N is a major north-south route and runs through the center of the village of Cottage Grove. It connects to 1-94 just north of the Town and with 1-90 to the south of the Town.

**Minor Arterials.** CTH BB is classified as a major collector and traverses the Town from east to west. It runs between Madison and Lake Mills to the east.

**Collectors.** Vilas Road between US Highway 12/18 and County Trunk BB is classified as a minor collector and a major collector from County Trunk BB to the interstate.

**Local Streets.** All other public roads in the Town that are not classified by the DOT are considered to be local roads.

### Traffic Conditions

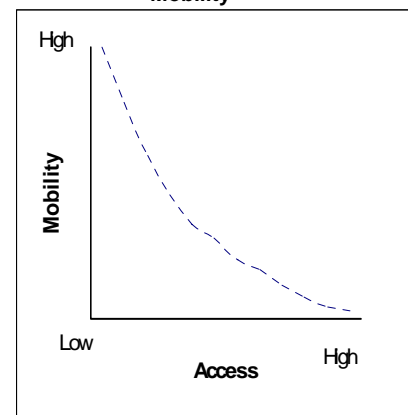
As part of a statewide system, the Wisconsin Department of Transportation monitors traffic flow at selected locations on three-year cycles. Map E- I shows the locations of *these counts* taken in or near the Town during 1999. With the exception of the interstate, traffic on US Highway 12/18 is the highest and is the dominant east-west route leading to the Madison-metropolitan area. County Trunk BB sees less than one-half of the traffic occurring on US Highway 12/18.

### Rustic Road Conditions

In 1973, the state legislature created the Rustic Roads System to help citizens and local units of government preserve what remains of Wisconsin's scenic, lightly traveled country roads for the leisurely enjoyment of bikers, hikers and motorists. Throughout the state, there are over 680 miles in the system with 84 designated roadways.

There are only two designated roadways in Dane County, none of which are located in the Town. Lalor Road is about 2.3 miles in length and is located on the west side of Lake Waubesa. Dyreson Road is 2.9 miles in length and is located on the northwest side of Lake Kegonsa.

**Exhibit E-2. General Relationship Between Access and Mobility**



**Page reserved for Map E -1 -- Functional Classification and traffic counts**

## Air Transportation

Within a 30-mile radius around the Town there are eight public use airports offering a full range of facilities and include the following:

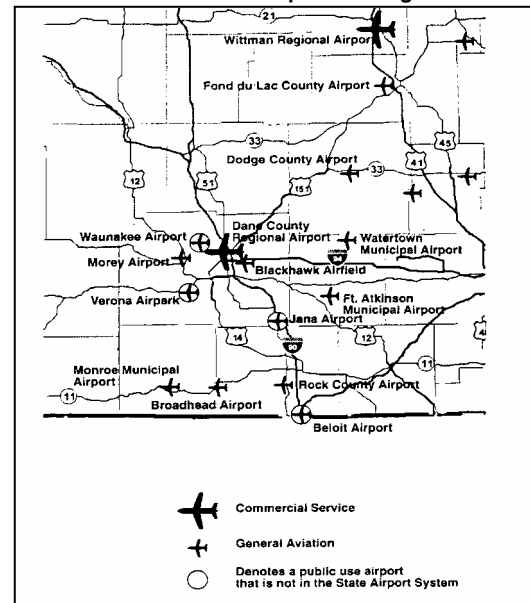
Blackhawk Airfield, Watertown Municipal Airport, Fort Atkinson Municipal Airport, Jana Airport (Edgerton), Verona Airpark, Morey Airport (Middleton), Waunakee Airport and Dane County Regional Airport (Exhibit E-3).

Of these Jana Airport in Edgerton and Verona Airpark are not part of the State Airport System and consequently are not eligible to receive public funding for improvements.

Blackhawk Airfield is located in the Village between Interstate 94 and CTH BB off of Kennedy Road. It is privately owned and operated. It is open to public use and is part of the State Airport System. The asphalt runway is 2,450 feet long and will accommodate most classes of general aviation aircraft. The airfield has a number of private hangars.

Dane County Regional Airport is the closest airport with full commercial service and general aviation facilities. Blackhawk Airfield and Morey Airport, both general aviation airports, are designated as reliever airports<sup>1</sup> to Dane County Regional Airport.

**Exhibit E-3. Public Use Airports in Region: 2000**



**Table E-1. Projected Aviation Operations for Airports in State Airport System in Region: 2000 to 2020**

Airport Name	2000	2010	2020	Percent Change 2000 - 2020
Blackhawk Airfield	21,700	22,600	23,500	8.3
Watertown Municipal Airport	49,820	53,420	57,120	14.6
Fort Atkinson Municipal Airport	6,700	6,700	6,700	0
Morey Airport (Middleton)	19,110	21,310	24,710	26.5
Dane County Regional Airport	167,400	176,000	183,700	9.7

Based on projections contained in the Wisconsin State Airport System Plan - 2020 (draft) these airports are expected to experience increased traffic levels in varying degrees (Table E-

1). Of the airports shown, only Morey Airport is expected to see a larger percentage increase in aviation operations<sup>2</sup> than the statewide average of 16.4 percent. Aviation operations at Blackhawk Airfield are expected to increase a modest 8 percent over the next 20 years.

<sup>1</sup> A reliever airport is a general aviation airport in a metropolitan area that general aviation pilots can use as an alternative landing area to more congested commercial service airports.

<sup>2</sup> An aviation operation is defined as either a landing or a takeoff. A plan that takes off and returns would account for two operations.

### **Railroad Facilities**

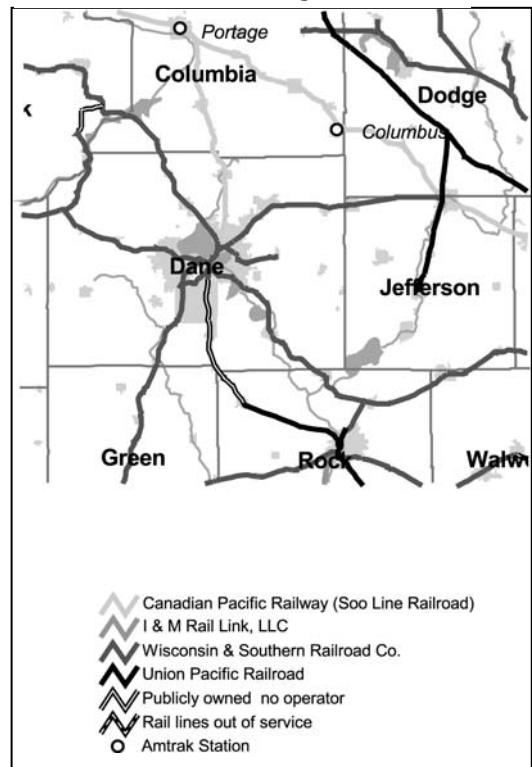
There are a number of freight railroads operating in the region (Exhibit E-4). Wisconsin & Southern Railroad Company operates a line between the village of Cottage Grove and Madison that connects into a number of other routes. Traffic on the line is infrequent and used on an as-needed basis. Lumber and fertilizer are commonly shipped on this line.

Amtrak provides passenger service between Minneapolis - St. Paul and Milwaukee and points beyond. The two closest Amtrak Stations are located in Columbus and Portage.

### **Bicycle / Walking Trails**

The Glacial Drumlin State Trail is located in the Town and is part of a statewide network of trails being developed by the Department of Natural Resources and other collaborators. The trailhead is located in the Village and the trail extends east into Waukesha County. This trail accommodates a wide range of activities including biking, hiking, pleasure walking and snowmobile use. The DNR is currently working to secure the necessary right-of-way to extend the trail from the trailhead to the west into Madison where it will connect to additional trails.

**Exhibit E-4. Railroads in Region: 2000**



Besides this trail, there are no other designated trails within the Town. Traffic volumes and road widths on many of the Town's streets allow bicycle traffic. However, as traffic volumes continue to climb, opportunities for bicycle use will decrease especially for families with children. Subdivisions situated in the Town do not have sidewalks.

### **Special Transit Facilities**

Within the Town there are no public transit facilities. The Retired Senior Volunteer Program (RSVP) offers transportation service for older adults for personal and medical needs. In addition, the Dane County Department of Human Services administers a transportation program to provide nutrition, shopping and adult day care group trips for seniors and people with disabilities.

## **Review of Existing Transportation Plans**

There are a number of statewide transportation planning efforts that will have a bearing on the presence or absence of transportation facilities and services in the region (Exhibit E-5). Most of these efforts developed umbrella policy documents that provide general goals and policies covering the state. The following sections provide a brief overview of the plans that have been completed or that are in a draft phase and how they might affect area residents and the preparation of this Plan.

In addition to these statewide plans, the DOT is working with Dane County and the city of Madison on an area-wide transportation plan entitled "Transport 2020".

**Exhibit E-5. Statewide Transportation Plans**

<b>Title</b>	<b>Responsible State Agency</b>	<b>Status</b>
Translinks 21	Department of Transportation	Adopted - 1994
Wisconsin Bicycle Transportation Plan - 2020	Department of Transportation	Adopted - December, 1998
Midwest Regional Rail System	Department of Transportation	Published – February, 2000
Wisconsin State Highway Plan 2020	Department of Transportation	Adopted - February, 2000
Wisconsin State Airport System Plan 2020	Department of Transportation	Adopted – February, 2000
State Recreational Trails Network Plan	Department of Natural Resources	Adopted January, 2001
Wisconsin Pedestrian Plan	Department of Transportation	Proposed completion – 2001
State Rail Plan	Department of Transportation	Proposed completion - 2002

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**TransLinks 21**

Beginning in 1994, the Department of Transportation began a planning process to develop a comprehensive, intermodal transportation plan as mandated by the federal government in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). The resulting plan, *Translinks 21*, is intended to guide transportation policies, programs and investments through the year 2020.

It outlines an aggressive program, estimated to cost \$39 billion over a 25-year period, which is about \$8.9 billion over projected spending levels. *Translinks 21* is intended to provide policy level guidance on the preparation of individual modal plans for highways, airports, railroads, bikeways and transit. Key programmatic elements are shown below in Exhibit E-6.

**Exhibit E-6. Translinks 21 -- Major Programmatic Elements****State Highways**

- Complete construction of the multilane Corridors 2020 Backbone network (more fully described below).
- Fund a new \$175 million Country Roads Program to maintain less-traveled state highways and provide habitat and landscape improvements to enhance the scenic, historic and other attractions surrounding the highway.

**Passenger Rail**

- In conjunction with Amtrak, develop new high-speed passenger rail service to various locations in the state.

**Air service**

- Invest \$50 million in airports to replace anticipated shortfalls in the federal Airport Improvement Program.

**Intercity Bus**

- Invest \$160 million to maintain existing intercity bus service and provide service to communities over 5,000 population.
- Invest \$25 million to help communities establish intercity passenger transportation stations connecting intercity bus, rail, auto and in some cases air services with each other and with municipal bus, taxi, or elderly and disabled services.

**Public Transit**

- Implement five new initiatives to maintain, improve and expand use of public transit in larger communities.

**Other**

- Increase funding for the Local Road Improvement Program (LRIP), which helps local communities pay for needed improvements on local routes.

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### **Wisconsin State Highway Plan – 2020**

The State Highway Plan 2020 outlines investment needs and priorities for the state's investment needs and priorities for the state's 1,800 miles of State Trunk Highway through the year 2020. Given the financial realities of maintaining this extensive road network (need exceeds anticipated funds), the plan establishes priorities for funding. Most of the funding is allocated to Corridors 2020 backbone and collector routes as shown in Exhibit E-7.

Interstate 94 and 90 are considered part of the backbone of Corridors 2020 and will continue to receive a high degree of maintenance and improvement when needed.

### **Wisconsin Bicycle Transportation Plan – 2020**

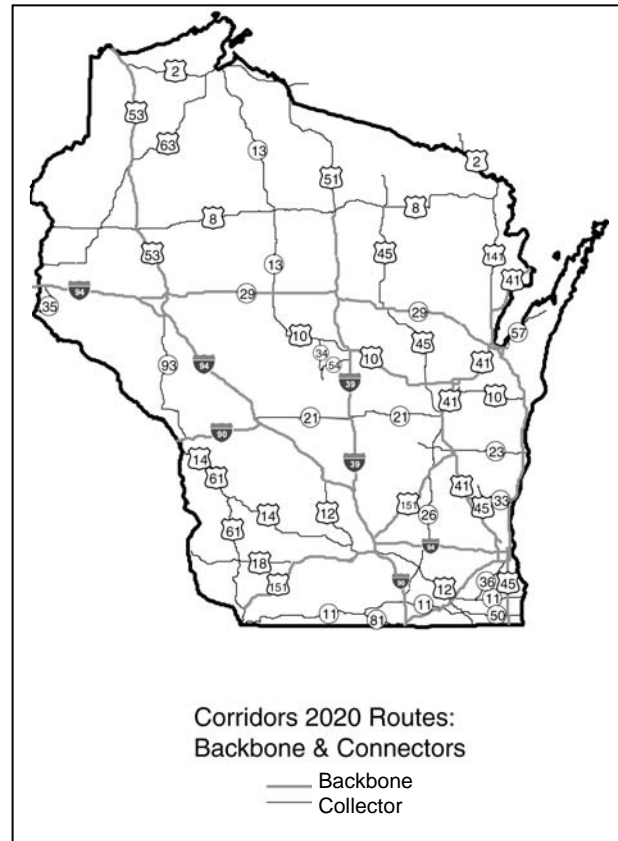
The Wisconsin Bicycle Transportation Plan – 2020 presents a blueprint for developing and integrating bicycling into the overall transportation system. In an effort to promote bicycling between communities, the plan analyzed the condition of all county trunk and state trunk highways in the state and produced maps showing the suitability of these roads for bicycle traffic. Suitability criteria were based primarily on road width and traffic volumes with secondary consideration given to pavement condition, passing opportunities and percent and volume of truck traffic.

The plan also identified state trunk highways suitable as "Priority Corridors and Key Linkages" that connect communities over 5,000 population and other major bicyclist destinations. Although these mapped routes currently occur only on state trunk highways, the plan anticipates that the routes will be extended to include other segments of County Trunk Highways as Smart Growth Plans are prepared and adopted in the future.

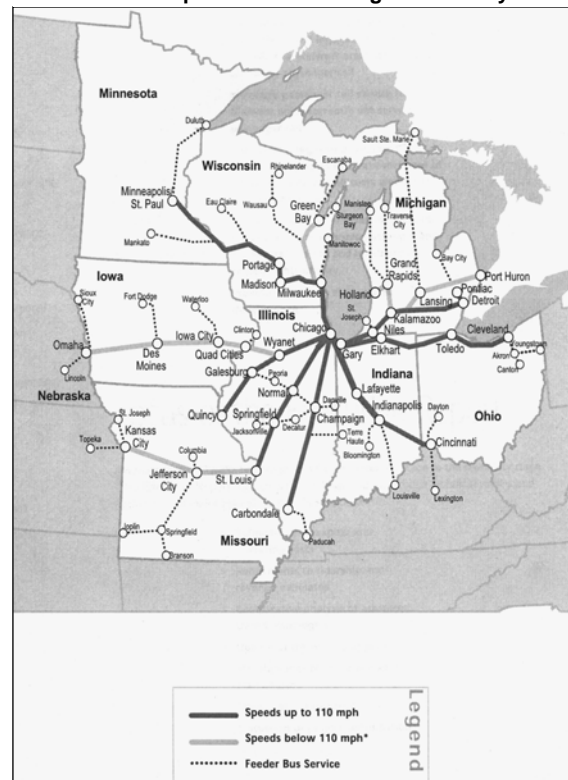
### **Midwest Regional Rail System**

Since 1996, transportation officials from 9 Midwest states, Amtrak and the Federal Railroad Administration have been developing a proposal to bring more efficient high-speed passenger rail to Midwest residents. The recently adopted, Midwest Regional Rail Initiative, lays out a general framework for developing and improving the 3,000-mile rail network, known as the Midwest Regional Rail System (MWRRS) (Exhibit E-8). The overall project would cost more than \$4 billion and would be implemented over 10 years. Although representatives from the participating entities

**Exhibit E-7. Corridors 2020**



**Exhibit E-8. Proposed Midwest Regional Rail System**



jointly developed the proposal, individual states will need to implement and fund specific projects within their state's jurisdiction. As of this date, the state has not authorized any specific projects. Implementation of all or part of the MWRSS in Wisconsin will likely be addressed in the state's Rail Plan currently under development.

As proposed, passenger railroad service would be more accessible for area residents, with a line running through the Madison area. Up to 10 round trips per day is anticipated between Madison and Milwaukee. Construction of this route as proposed in the plan would occur in years 2 and 3 of an 11-year implementation schedule.

### **Wisconsin State Airport System Plan - 2020**

The Wisconsin State Airport System Plan – 2020 has a 21-year planning horizon and provides a framework for the preservation and enhancement of public-use airports that are part of the State Airport System. Of the 143 public-use airports in the state, 100 are part of the system. Based on coverage of existing airports and anticipated demand, the plan recommends that no new airports be brought into the System and that no existing airport be eliminated.

The plan categorizes needed improvements into three groups: pavement, instrument capability and airport service level. The recommended set of policy scenarios generates a statewide total of estimated project costs for the 21-year planning period of nearly \$1.1 billion (1999 dollars). Although estimated costs were developed for each of the airports in the system, the plan did not itemize the costs for each airport so it is difficult to determine which airports have been identified as needing improvements over the next 21 years.

### **State Recreational Trails Network Plan**

The Wisconsin Department of Natural Resources is currently in the process of preparing the State Recreational Trails Network Plan, which will be an amendment to the Wisconsin State Trail Strategic Plan. This plan identifies a network of trail corridors throughout the state referred to as the "trail interstate system" that potentially could consist of more than 4,000 miles of trails. These potential trails follow highway corridors, utility corridors, rail corridors and linear natural features (e.g. rivers and other topographic features).

Given the scope of the plan and the inter-jurisdictional nature of linear trails, the DNR will need to work in partnership with the Department of Transportation, affected counties and other local units of government and interested user groups. The department would act as a facilitator helping with acquisition and in some instances development, as funding permits. This Plan and the DOT's Pedestrian Plan (discussed above) should be seen as complementary as there is often little distinction between recreational use of a trail and using the trail as a means of inter-city transportation. Even though a proposed trail corridor may not run through a community, the plan encourages communities and counties throughout the state to develop additional trails linking to the statewide trail system.

The plan shows the extension of the Glacial Drumlin State Trail from the village of Cottage Grove westward to Madison along the rail line operated by the Wisconsin & Southern Railroad Company. As of yet no timetable has been set for completing this link.

### **Transport 2020**

Transport 2020 is a current planning project undertaken by the Wisconsin Department of Transportation, the city of Madison and Dane County. The project focuses on transportation within and between Monona, Middleton, Madison and Sun Prairie. The study includes highway alternatives such as advanced technologies to improve highway operations and highway widening options, rapid transit alternatives and rail alternatives. Obviously, the selected alternatives will affect transportation within the Town.



## Programmed Transportation Improvement Projects

### **State and County Trunk Highways**

The Department of Transportation makes improvements to State Trunk Highways as listed in the Six-Year Highway Improvement Program. As shown in the current budget, there are a number of projects on US Highway 12/18. None of these are located within the Town or will have little affect on the traffic circulation system in the Town.

### **Airports in State Airport System**

Sponsors of airports in the State Airport System are eligible to apply for state and federal funding to help augment the cost of airport improvement projects that range in scope from very small improvements to major development and reconstruction projects. The Bureau of Aeronautics programs airport improvement projects around the state based on state and federal priority ratings, state and federal funding availability and other factors. The result is a Five-Year Airport Improvement Program that is updated every year. The projects listed in the first two years of the program are programmed for completion, while those in latter years are tentative.

Over the next 5 years, no improvements are currently planned at Blackhawk Airfield. Improvements to taxiways are programmed at Watertown Municipal Airport. At Dane County Regional Airport over \$29.8 million is programmed for a variety of improvements. However, none of these will improve these facilities to significantly increase capacity or accommodate larger aircraft.

## Future Transportation Plan

By in large, the Town's network of roads is in good condition and is an asset to build upon. To accommodate the anticipated growth over the next 20 years, only a few road improvements are needed as depicted in Map E-2 and as listed below.

- Upgrade Gaston Road from CTH N to the town line to a minor collector.
- Upgrade Vilas Road from Gaston Road to CTH BB to a minor collector.
- Upgrade Vilas Hope Road from CTH BB to the town line to a minor collector.
- Upgrade Buss Road from Gaston Road to CTH BB to a minor collector.
- Improve the intersection at Gaston Road and Vilas Road.
- Improve the intersection at CTH BB and Vilas Hope Road.
- Improve and realign the intersection at Vilas Road and CTH BB.

All of these projects are needed to accommodate high-density residential development in this area and the potential siting of a new public school near Buss Road and Gaston Road.

In addition, a number of improvements are needed to accommodate and promote bicycle use in the Town. These are shown on Map E-2 and are listed below.

- Designate a number of roads in the eastern half of the Town as a bicycle route to take advantage of the Glacial Drumlin State Trail. These roads include: Ridge Road, West Ridge Road, W. Jargo Road, Nora Road and Uphoff Road.
- Construct a bike lane along CTH BB from the Village to Ridge Road.
- Construct a bike lane along Gaston Road from CTH BB to Vilas Road.
- Construct a bike lane along Vilas Road from Gaston Road to Bass Road.
- Construct a bike lane along Vilas Hope Road from CTH BB to the town line.
- Construct a bike lane along CTH BB from the Village westward.

- Construct a bike lane along Baxter Road from the town line to CTH BB.
- Construct a series of bike/pedestrian paths between existing and future subdivisions in the northwest quadrant of the Town.

The addition of these bike facilities will allow residents in the higher density residential areas of the Town to safely get to and from the Glacial Drumlin State Trail and to other destinations.

## **Goals, Objectives, Policies and Recommendations**

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The goals, objectives, policies and recommendations for this element are found in Chapter B.